

AMENDMENTS

IN THE CLAIMS:

Please amend claim 8 to read as follows:

8. (twice-amended) A method for cleaning a process chamber in a CVD system for semiconductor and/or flat panel display manufacturing using hydrofluoric acid as a non-cleaning precursor gas, comprising the steps of:

generating a fluorine cleaning gas from said hydrofluoric acid via a fluorine gas generator, said fluorine gas generator on-site with and connected to the CVD system but remote to the process chamber in the CVD system, said generating step comprising:

converting hydrofluoric acid in said generator to a gas mixture of said hydrofluoric acid and said fluorine gas via electrolysis;

transferring the gas mixture to a cold trap directly connected to said generator, said cold trap further comprising means to connect to the CVD system;

converting said hydrofluoric acid gas into a liquid, removing said liquid hydrofluoric acid from the cold trap to said generator, said fluorine cleaning gas remaining in a gaseous form; and

delivering said fluorine gas via said connecting means to a location in the CVD system suitable for activation of said fluorine gas;

activating said fluorine cleaning gas via a radiofrequency energy source to form a plasma of fluorine radicals; and

cleaning the process chamber with said activated fluorine radicals.

Please amend claim 9 to read as follows:

9. (twice-amended) The method of claim 8, further comprising the step of:

pumping said fluorine cleaning gas into a storage unit prior to said delivery step.

Please amend claim 10 to read as follows:

10. (amended) The method of claim 8, wherein said location suitable for activating said fluorine radicals is the process chamber or a remote location outside the process chamber, said fluorine radicals subsequently delivered to the process chamber.

Please cancel claims 1-7, 11-12 and 15.